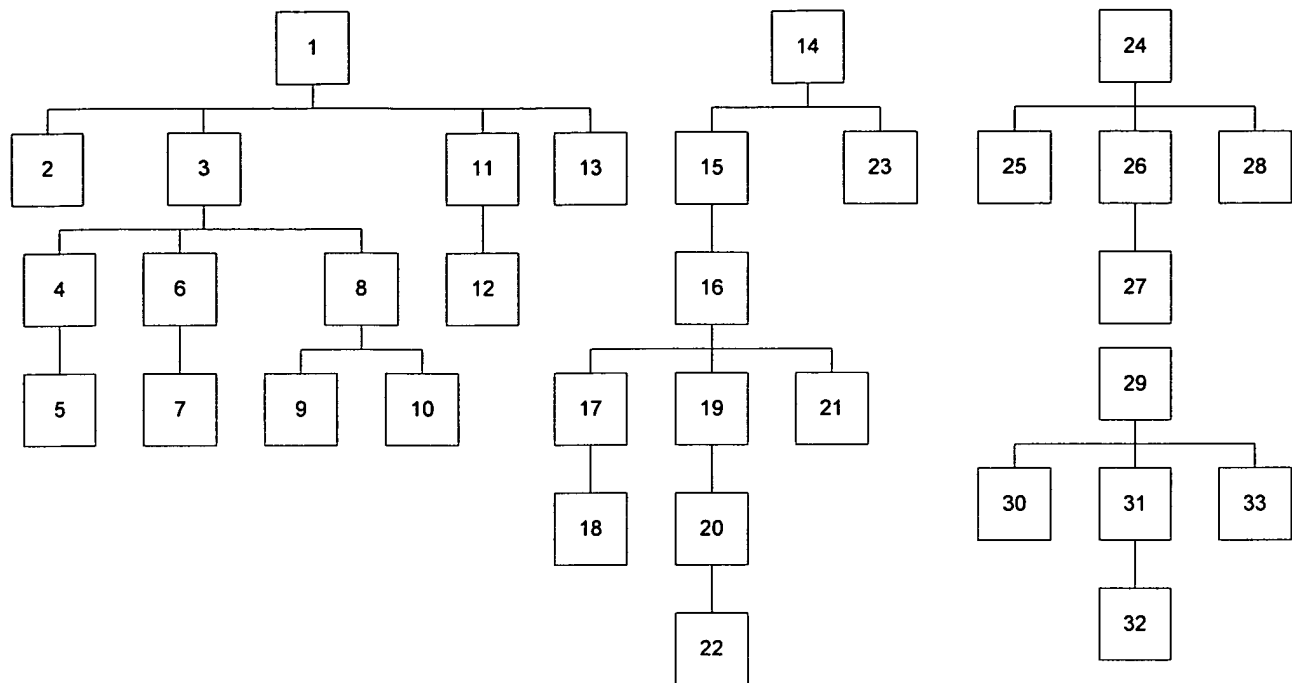


REMARKS

The Office action of September 12, 2003 has been carefully considered along with the cited references. Favorable reconsideration is requested in view of the foregoing amendments to the claims and the following remarks. Claims 1,3-12, 14, 16-24, 26-29 and 31-33 remain pending after entry of this amendment.

The claim set in set out below as a diagram illustrating the relationship among the claims. Claims 1, 14, 24 and 29 are independent claims. In this amendment, the each of the independent claims 1, 14, 24 and 29 has been amended to include the features of its respective dependent claim 2, 15, 25, and 30. These dependent claims have been canceled. Claim 13 has been previously canceled. Claim 16 has been amended to depend directly from claim 14.

The Office action rejects all pending claims. Specifically, claims 1, 2, 11, 14, 15, 23-25, 28-30 and 33 are rejected under 35 U.S.C. § 103(a) as unpatentable over Yokomizo (U.S. Patent 5,923,824) taken with the teachings of Sakuyama et al. (U.S. Patent 6,137,595) and Daur et al. (U.S. Patent 6,167,456). The remaining claims are rejected under 35 U.S.C. § 103(a) for being unpatentable in view of the teachings of these same three references plus the additional teachings of other references of record. Specifically, claims 3-8, 10, 16-22, 26, 27, 31 and 32 are rejected as unpatentable over the combined teachings in Yokomizo, Sakuyama, Daur and additionally Tretter (U.S. Patent 6,463,173). Claim 9 is rejected over Yokomizo, Sakuyama, Daur and additionally Tretter and Lipton (U.S. Patent 5,835,098). Claim 12 is rejected over Yokomizo, Sakuyama, Daur, and additionally Lipton.



By way of background, the invention is directed to an image acquisition framework of a computer that enables a device driver for an image-capturing device (e.g., a scanner) to automatically apply color management operations to image data captured by the image-capturing device. Instead of providing its own color management functions, the device driver leverages the advanced color management functions provided by the operating system of the computer. To that end, the operating system provides a color management application programming interface (API), which can be called by the device driver to invoke the functions of a color management component of the operating system.

Also, parameters for image acquisition by the image-capturing device are contained in an image acquisition control data structure, and the parameters are set by the application by calling an image acquisition API. One of the parameters is a color management parameter that indicates whether color management is to be performed on an image captured by the image-capturing device. In response to a request from the application to acquire an image, the device driver checks the image acquisition control parameters and controls the image-capturing device to obtain an image according to the image acquisition parameters. When the device driver receives the captured image from the device, if the color management parameter is set, it calls the color management API to invoke a color management function of the color management component. The device driver then forwards the processed image data to the application.

The amendments to the claims focus on two aspects of the invention.

The first aspect is a data structure containing image acquisition control parameters for the image-capturing device. The image acquisition control parameters are set by the application, and one of the parameters is a color management parameter that indicates whether the device driver should apply color management to an acquired image.

CLAIM	ELEMENT
1	"an image acquisition interface for calling by the application to set image acquisition control parameters in an image acquisition control data structure, said image acquisition control parameters including a color management parameter indicating whether color management is required"
14	"checking image acquisition control parameters in an image acquisition control data structure, said image acquisition control parameters being set by the application and including a color management parameter indicating whether color management is to be performed"
24	"an image acquisition interface for calling by an application to set image acquisition control parameters in an image acquisition control data structure, said image acquisition control parameters including a color management parameter indicating whether color management is required"
29	"checking image acquisition control parameters in an image acquisition control data structure, said image acquisition control parameters being set by the application and including a color management parameter indicating whether color management is to be performed"

The second aspect is that the color management component, which provides color management functions, is a component of the computer's operating system. The device driver calls a color management API to invoke the color management functions of the color management component.

CLAIM	ELEMENT
1	"a color management application programming interface for calling by the device driver to invoke color management functions of the color management component"
14	"calling a color management application programming interface to invoke a color management function of a color management component of an operating system to process the color image data received from the image-capturing device when the color management parameter is set to indicate that color management is to be performed"
24	"a color management application programming interface for calling by the device driver to invoke color management functions of the color management component of the operating system"
29	"calling a color management application programming interface to invoke a color management function of a color management component to process the color image data received from the image-capturing device when the color management parameter is set to indicate that color management is to be performed"

In keeping with these aspects of the invention, the claims describe setting the color management parameter by the application and calling an API for invoking the functions of a color management component of the operating system. Neither of these features is taught or suggested by the cited references.

For instance, Yokomizo, which is the primary reference relied upon by the Office action, teaches a “Virtual Color Space Conversion Protocol.” According to that protocol, the transmitter and receiver of color image data communicate via packet transmissions indicating whether each of them has a color conversion function. Col. 6, lines 17-32. The color conversion operation is entrusted to the data receiving side if the receiving side has the operation function. Col. 5, lines 50-59. Thus, Yokomizo does not have an application corresponding to the image receiving side that sets image acquisition control parameters in a data structure for an image-capturing device. It follows that Yokomizo also does not have a parameter indicating whether the device driver, which corresponds to the image transmitting side, should perform color management on the captured image data.

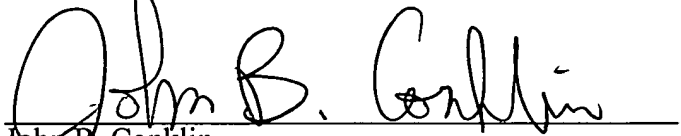
Moreover, none of the relied upon references teaches or suggests the provision of an API allowing a device driver to invoke functions of a color management component of the operating system. For instance, the Tretter reference teaches that all the function modules involved in the contrast enhancement operation are contained in the device driver 125. *See*, FIG. 4 of Tretter.

Conclusion:

In view of the foregoing, this application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John B. Conklin", written over a horizontal line.

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